# CHAPTER 4 ENVIRONMENTAL CONSEQUENCES

#### 4.1 Introduction

This chapter evaluates potential environmental effects that could result from implementing any alternative described in Chapter 2 of this Resource Management Plan Amendment/Environmental Assessment. The baseline used for this section of the analysis is the current resource condition described in Chapter 3. The purpose of this chapter is to determine if there would be any potential direct, indirect, or cumulative impacts to the natural and human environments from either alternative.

This analysis is a cause and effect process. The analysis in this Chapter is based on the planning team's knowledge of resources and the Plan Area, reviews of the existing literature, and information provided by experts in the BLM and other agencies.

The resources were analyzed and discussed commensurate with resource issues and concerns identified though scoping. GIS analysis and data from existing sources were used to quantify potential effects where possible. In the absence of quantitative data the best professional judgment was used.

This section serves to define for the reader the terms found in Chapter 4. The terms "impacts" and "effects" are used interchangeably. To the extent possible, impacts are identified objectively, without characteristics as positive or negative, so that the reader may make his or her own judgment.

Other terms that are used in this chapter are:

*Direct effect:* These are effects that are caused by the action and occur at the same time and place.

*Indirect effect*: These are effects that are caused by the action and occur later in time or are removed in the distance, but are still reasonably foreseeable.

Cumulative effect: These are impacts on the environment which result from the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions occurring within the same area of influence to other past, present.

Negligible: The impact is at a lower level of detection, and there would be no measurable change.

*Minor*. The impact is slight but detectable and there would be a small change.

Short-term effect: The effect would only occur during or immediately after implementation of the action.

Long-term effect: The effect could occur for an extended period after implementation of the action. The effect could last several years or longer.

### 4.2 AIR QUALITY

# AIR QUALITY ALTERNATIVE A - NO ACTION, CONTINUATION OF CURRENT MANAGEMENT

Under this alternative approximately 18,680 acres of public land would be identified for retention. No ground disturbing activities would commence that could create a short-term air quality issue. The present levels of off-road vehicle activity do not create any direct or indirect impacts to air quality in Alpine County. Should suspended particulates from ground disturbing activities occur, these would be considered short-term. Suspended particulates from authorized grazing could occur but is determined to be short-term. Livestock grazing management that is currently allowed would have no direct or indirect impacts to air quality. There would not be any cumulative effects to air quality from this alternative.

### AIR QUALITY ALTERNATIVE B - PROPOSED RESOURCE MANAGEMENT PLAN AMENDMENT

Under this alternative approximately 955 acres would be identified for lease to a qualified applicant. Future ground disturbing activities may take place. Should these lands be leased, further environmental analysis is required as a separate lands and realty action. Designation of a road and trail network in and of itself would not lead to any indirect or direct impacts to air quality. Under this alternative three allotments would be closed to all grazing and the fourth closed to cattle grazing. The livestock grazing alternative would not have any direct or indirect impacts to air quality. There would not be any cumulative effects to air quality from this alternative.

### 4.3 CULTURAL RESOURCES

### CULTURAL RESOURCES ALTERNATIVE A - NO ACTION, CONTINUATION OF CURRENT MANAGEMENT

Under the current management alternative there would be no potential direct or indirect effects to cultural resources because all lands would remain identified for retention.

Current management concerning cultural resources within the Fay-Luther Canyon area would continue to be susceptible to degradation from soil disturbance due to random motorized travel. There is an assumption that uncontrolled motorized activity in this area could have potential to impact documented and undocumented cultural resources sites that hold both scientific and cultural values should this alternative be chosen. Current trails and travel management within other areas of Alpine County would constitute no potential direct or indirect effects to cultural resources.

Current management concerning livestock grazing in the Harvey Flat, Indian Creek, and Millberry Canyon allotments could have negligible potential for direct or indirect impacts to documented and undocumented cultural resources sites that hold both scientific and cultural values. However, since livestock actually graze one area of one allotment, only that area may be potentially affected. Current livestock utilization levels are not causing known cultural resources degradation. There would not be any cumulative effects to cultural resources from this alternative.

# CULTURAL RESOURCES ALTERNATIVE B -- PROPOSED RESOURCE MANAGEMENT PLAN AMENDMENT

Under this alternative lands identified for disposal could potentially impact currently unknown locations of cultural resources. Further environmental analysis would occur as a separate action from this plan amendment as required. Per federal cultural resources laws, regulations, and protocol, lands for disposal would be inventoried for cultural resources and Native American tribal entities consulted prior to any specific action. If cultural resources are identified and evaluated as important and retaining scientific and/or cultural values, they would be treated on a case-by-case basis and according to Federal cultural resources laws, regulations, and protocol. This alternative does not have potential for direct or indirect effects to cultural resources.

Designation of travel routes within the Plan Area would have long-term beneficial effects specific to cultural resource locations and cultural landscapes. Roads and trails could be closed or realigned in order to mitigate or avoid important resource locations. This would be accomplished during the implementation phase of trails and travel management. The proposed designation of closure to motorized vehicle travel for Fay-Luther Canyon area would allow protection of cultural resources relative to motorized travel; thus no direct or indirect effects to cultural resources are identified.

The closure of three grazing allotments and a fourth specifically for cattle would also protect documented and undocumented cultural resources sites that hold both scientific and cultural values. There would not be any cumulative effects to cultural resources from this alternative.

### 4.4 INVASIVE, NON-NATIVE SPECIES

### INVASIVE, NON-NATIVE SPECIES ALTERNATIVE A - NO ACTION, CONTINUATION OF CURRENT MANAGEMENT

Under the continuation of current management alternative for lands and realty there would be no potential direct or indirect impacts from invasive, non-native species. Roads and trails would remain undesignated. This may contribute to proliferation of invasive, non-native weed dispersal and have potentially minor effects along undesignated roads and trails. In this alternative, should these lands remain open to grazing there could be negligible effects to Millberry, Indian Creek, Harvey Flat and Bagley Valley (cattle) allotments concerning invasive, non-native weed dispersal. There would not be any cumulative effects to invasive, non-native species from this alternative.

## INVASIVE, NON-NATIVE SPECIES ALTERNATIVE B - PROPOSED RESOURCE MANAGEMENT PLAN AMENDMENT

Under this alternative introduction of invasive, non-native species could occur on lands identified for lease. However, as discussed above, further environmental analysis would be required as a separate action. A designated trails and travel network would have minor benefits regarding the proliferation of invasive, non-native species. There would be less opportunity for seed dispersal by limiting the amount of randomly created trails, primitive roads, or roads. There could be minor benefits concerning the spread of invasive, non-native species by closing Harvey Flat, Indian Creek, and Millberry Canyon Allotments. No potential direct or indirect impacts from invasive non-native species would result if this alternative were selected. There would not be any cumulative effects to invasive, non-native species from this alternative.

# 4.5 THREATENED, ENDANGERED, PROPOSED FOR LISTING AND CANDIDATE (ANIMALS)

# THREATENED, ENDANGERED, PROPOSED FOR LISTING AND CANDIDATE (ANIMALS) ALTERNATIVE A - NO ACTION, CONTINUATION OF CURRENT MANAGEMENT

Under the current management regarding lands and realty there would be no public land identified for disposal under the Recreation and Public Purposes Act, thus there would be no potential for direct or indirect effects to threatened and endangered species.

The current management of *limited* to existing roads and trails in Bagley Valley and Indian Creek Recreation Area could enhance Lahontan cutthroat throat (LCT) potential and existing habitat; bald eagles; and the Yosemite toad and by minimizing habitat fragmentation from proliferation of non-authorized roads and trails. Areas *open* to motorized travel could potentially impact all of the federally listed species and their occupied and potential habitat in the short and long-term.

Continuing livestock grazing in Millberry, Indian Creek and Harvey Flat, and Bagley Valley allotments could have potential direct and indirect impacts to both listed species of fish, the Yosemite toad and the Mountain yellow-legged frog as well as their respective potential habitats in the long-term. There would not be any cumulative effects to threatened and endangered species from this alternative.

# THREATENED, ENDANGERED, PROPOSED FOR LISTING AND CANDIDATE (ANIMALS) ALTERNATIVE B - PROPOSED RESOURCE MANAGEMENT PLAN AMENDMENT

Closing public access to lands leased to STPUD for health and safety could be beneficial specifically for Bald eagle nesting as there would be fewer instances of disturbance and intrusion from the public during nesting season. This alternative for land disposal would not have any potential impacts to federally listed species because there are no listed species located on lands proposed for disposal.

Designation of travel routes within the Plan Area would be beneficial for federally listed species and habitats in the short and long-term since travel management planning for the designations would avoid or provide mitigation for potential and occupied habitats. The proposed *closed* to motorized vehicles travel designation for Fay-Luther Canyon area would reduce or eliminate any potential direct or indirect impacts that might be occurring to the Bald eagle and its habitats (BAE #004-06).

The closure of three grazing allotments and limitations on livestock grazing in the Bagley Valley allotment would ensure the toad, the frog, and LCT and PCT historic habitat would not be impacted by livestock use in the long-term. There would not be any cumulative effects to threatened and endangered species from this alternative.

A Memorandum from the US Fish and Wildlife Service dated May 29, 2007, (Appendix C) concurred with the Carson City Field Office request for informal consultation concerning the Lahontan cutthroat trout and bald eagle.

### 4.6 WATER QUALITY (SURFACE)

# WATER QUALITY (SURFACE ALTERNATIVE A - NO ACTION, CONTINUATION OF CURRENT MANAGEMENT

Under the current management regarding water quality there would be no public land identified for disposal under the R&PP Act, thus there would be no potential for direct or indirect effects to water quality.

Under this alternative motor vehicles would continue to be allowed in the Fay-Luther Canyon area and water quality impacts could occur. This alternative may compromise water quality from sedimentation that would result from soil disturbance in the watershed.

Under this alternative continuing to limit motorized vehicle use to designated roads and trails in Bagley Valley and the Indian Creek Recreation Area would provide some protection of water quality by preventing new soil disturbance in the watersheds and near streams and other water bodies. Unsurfaced roads and trails can be major source areas for sediment, and ongoing use of undesignated routes would generate sediment that could reach water bodies. Motorized vehicle use also poses some risk of fuel or fluid spills, and indirect impacts associated with vehicle access, such as trash dumping.

The current *open* designation in the Plan Area to motorized vehicles could result in potential direct or indirect impacts to water quality. Demand for recreational access is increasing and an *open* designation could result in a proliferation of new roads and trails. Each new route could increase the area of disturbance and amount of soil erosion. The risks of fluid spills and other indirect impacts could also increase.

Continuing current livestock management under the alternative could affect water quality to varying degrees in the Plan Area. Livestock could potentially degrade water quality by removing and trampling vegetative cover, disturbing soils, and producing animal waste. The Indian Creek, Harvey Flat, and Millberry Canyon allotments are not currently under permit for livestock grazing, so no potential direct or/or indirect impacts are occurring. If they were permitted in the future however, potential direct and/or indirect impacts could result. In particular, the Harvey Flat allotment could further degrade water quality in Indian Creek and Indian Creek Reservoir. These water bodies were placed on the 303(d) list for habitat alterations and pathogens, and total phosphorous, respectively. Phosphorous inputs to the reservoir would be the most serious problem because the TMDL implementation plan for total phosphorous requires BLM to limit potential sources. Livestock grazing was cited as a potential source of the water quality limitations. Issuing livestock grazing permits would likely result in increased levels of these pollutants; to what degree would depend on permitted use levels and allotment management. There would not be any cumulative effects to water quality from this alternative.

# WATER QUALITY (SURFACE) ALTERNATIVE B – PROPOSED RESOURCE MANAGEMENT PLAN AMENDMENT

The proposed revocation of the Bureau of Reclamation withdrawal would not have potential direct or indirect effects to water quality. This action would involve a short length of Snowshoe Thompson Ditch and management would not be expected to change.

Possible acquisitions from willing sellers in addition to designating 17,615 acres for retention would allow the BLM to more effectively manage public lands for water quality protection and improvement as well as other resources. Designating approximately 955 acres for disposal under the R&PP Act would not cause potential direct or indirect impacts to water quality. Development subsequent to an actual disposal might pose risks to water quality, and any future proposals would require additional analysis to analyze potential impacts.

Limiting the use of motorized vehicles to designated roads and trails would protect water quality from increased degradation in the long term. The designation would diminish the proliferation of new roads and trails that could cause soil erosion possibly leading to sedimentation of streams and other water resources. The motorized vehicle closures in the Fay-Luther Canyon Area and Indian Creek Recreation Area would afford even greater protection for water quality.

The Indian Creek, Harvey Flat, and Millberry Canyon allotments are not currently permitted for livestock grazing, so no potential direct or indirect livestock impacts are occurring. Under Alternative B water quality would be protected from grazing impacts in the future by closing grazing within these allotments. In addition, water quality would benefit by closing grazing to cattle on the Bagley Valley allotment. Closing the allotment to grazing on the Harvey Flat allotment would be especially beneficial for water quality in Indian Creek and Indian Creek Reservoir. Livestock grazing was cited as a potential source of the water quality limitations for these water bodies, which were placed on the 303(d) list for habitat alterations and pathogens, and total phosphorous, respectively. Reducing phosphorous inputs to the reservoir would be the most significant benefit because the TMDL implementation plan for total phosphorous requires BLM to limit potential phosphorous sources. There would not be any cumulative effects to water quality from this alternative.

#### 4.8 LANDS AND REALTY

### LANDS AND REALTY ALTERNATIVE A - NO ACTION, CONTINUATION OF CURRENT MANAGEMENT

Existing land use authorizations would not have any potential impacts under the continuation of current management. Pursuit of revocation and restoration to the operation of the public land laws and general mining laws of 80 acres currently held under withdrawal by the Bureau of Reclamation and Bureau of Land Management in Section 25, T. 11 N., R. 19 E. would not be considered. Conveyance of 955 acres of public land to Alpine County for public purposes under the Recreation and Public Purposes Act of 1926 would not be considered. There would be no lands identified to meet public demand for community expansion (new public facilities) in the community.

The existing situation for travel management would have negligible effects on lands and realty. Land use applications would continue to be processed on a case-by-case basis.

The existing situation for livestock grazing would have negligible effects on lands and realty. Under this alternative no lands would be conveyed out of public ownership. Any potential direct or indirect impacts to proposed conveyances from existing grazing permits would not occur. Other land use applications would be processed on a case-by-case-basis. There would not be any cumulative effects to lands and realty from this alternative.

### LANDS AND REALTY ALTERNATIVE B – PROPOSED RESOURCE MANAGEMENT PLAN AMENDMENT

Under this alternative R&PP applications from qualified applicants would be accepted on the 955 acres identified by Alpine County. Applications would be processed in accordance with current BLM regulations and policy. Existing individual wildlife species and local habitats on lands identified for disposal could have potential impacts on future land disposals to the county. Placement of proposed rights-of-way or maintenance on existing rights-of-way could be impacted by existing wildlife populations. Prior to authorizing any proposed land use, appropriate NEPA analysis would be required for all resources potentially affected. Identification of significant cultural resources, threatened or endangered species or other resource issues could result in modifications to the proposed land use. Under this alternative for lands and realty, there would be no potential for direct or indirect effects to livestock grazing. Lands managed by Bureau of Reclamation would be managed by BLM and managed consistent with adjacent lands within the ICRL boundary. There would not be any cumulative effects to lands and realty from this alternative.

### 4.9 LIVESTOCK GRAZING

### LIVESTOCK GRAZING ALTERNATIVE A – NO ACTION, CONTINUATION OF CURRENT MANAGEMENT

Under this alternative there would be no direct or indirect effects to livestock grazing from the present management of retention of lands in Alpine County. Forty AUMs of livestock forage would continue to be available in the Millberry Canyon allotment.

Travel management in the Bagley Valley allotment and portions of the Indian Creek allotment is *limited* to existing roads and trails. Livestock grazing would not be affected by a *limited* travel designation. Access to range improvement projects for maintenance is permitted through administrative permit. There would not be any potential direct or indirect effects to livestock grazing.

Under current management a total of 2,130 AUMs combined from the Indian, Millberry, Harvey Flat and Bagley allotments would remain available to grazing under a permit. There would not be any cumulative effects to livestock grazing from this alternative.

### LIVESTOCK GRAZING ALTERNATIVE B – PROPOSED RESOURCE MANAGEMENT PLAN AMENDMENT

Under this proposal 955 acres within the Millberry Canyon Allotment would be identified as available for disposal to Alpine County through the R&PP Act. If this alternative is selected, 40 AUMs of forage on public lands would no longer be available for livestock use.

Under this alternative limiting motorized travel to existing roads and trails would not have any potential direct or indirect impacts to livestock grazing.

This alternative would close the following to livestock grazing: 1,480 acres (40 AUMs) in the Millberry Canyon allotment; 346 acres (59 AUMS) in the Indian Creek allotment; in the Harvey Flat allotment of 4,312 acres (300 AUMs), and (cattle only) in the Bagley Valley allotment 5,768 acres (1,731 AUMs). These proposed administrative changes to livestock grazing on BLM managed lands reflect management directions on the surrounding private and Forest Service lands. The grazing permittees for these allotments voluntarily relinquished their grazing privileges and permits several years ago when they sold their base properties. The new base property owners did not apply for the BLM grazing permits. There would be no potential direct or indirect effects to livestock grazing. There would not be any cumulative effects to livestock grazing from this alternative.

#### 4.10 RECREATION

### RECREATION ALTERNATIVE A - NO ACTION, CONTINUATION OF CURRENT MANAGEMENT

Under this alternative BLM managed lands located primarily west of Highway 89 would remain available for recreation to the public and not be identified for disposal.

There would be no potential effects to recreation opportunities from continuing current management concerning travel designations of *open* and *limited* to existing roads and trails.

Under this alternative BLM managed lands in the Harvey Flat Allotment, which encompasses a large portion of the Indian Creek Recreation Lands, would remain available for livestock grazing use. If this alternative is selected the potential for estray cattle entering the campground and recreation lands around the reservoir would continue to exist. As a result, minor impacts to public health and safety within the developed area may occur. There would be no potential direct or indirect effects to recreation within the Millberry, Indian Creek or Bagley Valley allotments. There would not be any cumulative effects to recreation from this alternative.

# RECREATION ALTERNATIVE B -- PROPOSED RESOURCE MANAGEMENT PLAN AMENDMENT

Under this alternative BLM managed lands located west of Highway 89 would be identified as available for use by Alpine County for public purposes. Lands identified for disposal would not be available for dispersed recreation or developed recreation opportunities. However, any potential direct impacts to dispersed recreation would be negligible considering the amount of undeveloped public lands (BLM and FS) in the immediate area. Documented recreation uses west of Hwy 88 on public lands indicate that the use is limited or is not present. There would be no potential direct or indirect effect to recreation from this alternative.

This alternative may have negligible effects to recreation opportunities for dispersed camping on lands designated as *limited* to existing travel on roads and trails. However, public lands in Alpine County have a network of roads and trails that provides access to all but the most remote and rugged terrain. The preliminary road and trail network provides approximately 10.8 linear miles of travel opportunity. There would be no potential direct or indirect effect to recreation from travel management designations in this alternative.

Under this alternative BLM managed lands in the Harvey Flat Allotment, which encompasses a large portion of Indian Creek Recreation Lands, would no longer be available for livestock grazing use. If this proposed action is selected it would eliminate the potential for estray cattle into the campground and around the reservoir. As a result, public health and safety and user experiences associated with developed recreation opportunities in the area would benefit. There would be no potential direct or indirect effect to recreation in this alternative. There would not be any cumulative effects to recreation from this alternative.

### 4.11 Socio-Economic

### SOCIO-ECONOMIC ALTERNATIVE A - NO ACTION, CONTINUATION OF CURRENT MANAGEMENT

Under current management there would not be any lands identified for disposal to qualified applicants under the R&PP Act. Future opportunities for community expansion or economic development would not occur. There could potentially be minor direct and indirect socio-economic effects. The existing management for travel or livestock grazing would not have potential for direct or indirect impacts to socio economics. There would not be any cumulative effects to socio-economic resources from this alternative.

# SOCIO-ECONOMIC ALTERNATIVE B – PROPOSED RESOURCE MANAGEMENT PLAN AMENDMENT

Under this alternative 955 acres are identified for disposal to qualified applicants under the R&PP Act. Community infrastructure needs would be met under this alternative, resulting in both direct and indirect benefits.

Designation of travel management routes on approximately 18,680 acres would not have any potential direct or indirect effects concerning socio-economic resources.

Under this alternative Indian Creek (59 AUMs), Harvey Flat (300 AUMs), Millberry Canyon (40 AUMs) and Bagley Valley (1,731 AUMs Cattle) allotments would be cancelled and the BLM lands within the Indian Creek, Harvey Flat and Millberry Canyon allotments would no longer be available for livestock grazing use under a permit. Any potential direct or indirect socio-economic effects associated with the

loss of AUMs would have occurred when private property owners decided to no longer graze livestock and/or the management of the base properties changed through land ownership. As described in Chapter 3, unfenced mixed land ownership and low availability of forage and water make it impractical to graze livestock solely on BLM managed lands within these allotments. There are no potential direct or indirect effects to socio-economics concerning livestock grazing should this alternative be selected. There would not be any cumulative effects to socio-economic resources from this alternative.

### 4.12 TRAILS & TRAVEL MANAGEMENT

## TRAVEL MANAGEMENT ALTERNATIVE A - NO ACTION, CONTINUATION OF CURRENT MANAGEMENT

Retention of public lands would have negligible impacts to travel management. Public use of undesignated roads and trails would continue to occur.

Under current management 268 acres adjacent to Harvey Reservoir (STPUD) would remain *open* to motorized use and public access. Also under this alternative motorized use would continue on approximately 12,265 acres and remain managed as *limited* to designated routes and approximately 6,415 acres would remain managed as *open*. Under this alternative roads and trails would remain undesignated and undefined. The potential for cross-country use to increase could be minor to moderate. Potential conflicts and safety concerns between motorized and non-motorized recreation uses would exist and are likely to increase. Motorized opportunities would increase and would eventually detract from both the motorized and non-motorized user's experience. Under current management the Fay-Luther Canyon Area (894 acres) would retain the designation of *open* to motorized travel. There could be direct and indirect effects to wildlife, soils, and water quality should this alternative be selected.

Non-motorized passive recreation opportunities and experiences would continue at current levels. Under this alternative 6,200 acres of public lands currently managed as *limited* to designated road and trails in Bagley Valley would remain undesignated as such. Under current management there are no potential impacts to trails and travel management from livestock grazing. There would be no cumulative effects to trails and travel management.

### TRAVEL MANAGEMENT ALTERNATIVE B -- PROPOSED RESOURCE MANAGEMENT PLAN AMENDMENT

Conveyance of lands under the R&PP Act to a qualified applicant would not have an adverse impact on travel management. The lands are located on the west side of Highway 89 opposite of the core BLM lands to the east. The majority of existing recreation opportunities are located on public lands east of Hwy 89. The proposed disposal acreage is relatively low, fractured, removed from the main BLM land base and therefore would not be considered a priority to incorporate into overall travel

management. There would not be any potential direct or indirect effects to trails and travel management.

In this alternative motorized use on BLM managed lands would be managed as either *closed* or *limited* to designated routes. Under this alternative all motorized recreation opportunities would be eliminated in the Fay Luther Canyon area (894 acres). Safety concerns and conflicts between motorized and non-motorized recreation users would decrease. Potential direct and indirect effects to water quality would be prevented. Non-motorized, passive use experiences would be enhanced. Lands identified as the Carson-Iceberg and Slinkard WSAs would be designated as *closed* to motorized activities regardless of their WSA status.

Lands amounting to 268 acres would be closed to pedestrian and motorized access for health and safety concerns in the vicinity of Harvey Reservoir. Under this alternative 268 acres within the South Tahoe Public Utility District right-of-way would be closed to motorized travel and public access for health and safety reasons. Dispersed camping or public access has not been documented within the 268 acres presently under a right-of-way permit to STPUD.

Under this alternative a road and trail network would be identified and managed to enhance motorized and non-motorized opportunities and experiences. All cross-country motorized travel would be eliminated. Indirect impacts to motorized dependant dispersed recreation opportunities (i.e. hunting) would be minor. Non-motorized recreation opportunities would be maintained and enhanced by allowing managed motorized access to the backcountry. Non-motorized experiences would be enhanced and opportunities for solitude would increase. There would not be any potential direct or indirect effects to trails and travel management.

Under this alternative there are no potential direct or indirect effects to livestock grazing from trails and travel management. There would be no cumulative effects to trails and travel management.

### 4.13 WILDLIFE

WILDLIFE ALTERNATIVE A - NO ACTION, CONTINUATION OF CURRENT MANAGEMENT Under this alternative retention of lands could have long-term benefits for wildlife.

Under this alternative the current travel designations have potential for direct or indirect impacts to general wildlife habitat via fragmentation, interruption of reproductive processes and physical habitat destruction. Key mule deer fawning and sage grouse use areas may currently be impacted due to motorized, off-road uses of the *open* to motorized travel areas.

Continuing the current situation of allowing livestock grazing in Harvey Flat, Indian Creek, Millberry and Bagley Valley allotments would favor general wildlife species associated with mid or low-seral vegetation conditions. However, since livestock

actually only graze one area of one allotment, only that area is currently effected. The other allotments are at or nearing potential for species richness and diversity. There is no sage grouse habitat degradation. There would be no cumulative effects to wildlife.

#### **Special Status Species**

Under this alternative retention of lands could have long-term benefits for BLM sensitive and California species.

Under this alternative those areas with *open* to motorized travel could have minor impact for some sensitive and California status species by fragmenting habitats, and blocking movement of some species and by interrupting reproductive processes.

Continuing the current situation of allowing livestock grazing in Harvey Flat, Indian Creek, Millberry and Bagley Valley allotments would favor sensitive and California status species associated with mid or low-seral vegetation conditions. However, since livestock actually only graze one area of one allotment, only that area is currently effected. The other allotments are at or nearing potential for species richness and diversity. There would be no cumulative effects to special status species wildlife.

### WILDLIFE ALTERNATIVE B -- PROPOSED RESOURCE MANAGEMENT PLAN AMENDMENT

Land disposal could have potential direct or indirect impacts to individual(s) of local wildlife species and local habitats in the long-term due to potential future Alpine County use under an R&PP lease. Subsequent environmental analysis would be required for lands identified for lease under an R&PP as required by NEPA. Overall wildlife populations and landscape scale habitats would not be affected. Any potential impacts to key game species areas could be avoided or minimized during future project specific planning. This could be a benefit to general wildlife species.

Designation of travel routes within the Plan Area would benefit general wildlife habitat and game species key habitats in the long-term. Fragmentation of general wildlife habitats, disruption of reproductive processes and habitat destruction could be mitigated or avoided during designation planning. A designation of *closed* to motorized vehicles for Fay-Luther Area, Carson-Iceberg WSA, and Slinkard Valley WSA would allow general wildlife species diversity and richness to move toward potential and would curtail further damage to, and fragmentation of, general wildlife habitats. There are no potential direct or indirect effects to trails or travel management from wildlife.

The closure of three grazing allotments and a fourth to cattle grazing would allow general wildlife species to reach and/or maintain potential species diversity and richness in the long-term because livestock grazing would be precluded. There are no potential direct or indirect effects to livestock grazing from trails and travel management. There would be no cumulative effects to wildlife.

#### **Special Status Species**

Land disposal could impact individual sensitive and California status species in the long-term due to potential future county use. However, site specific project planning would identify, analyze and mitigate effects to potentially affected species.

Designation of travel routes within the Plan Area would benefit sensitive and California status wildlife species in the long-term. Fragmentation of sensitive and California status habitats could be avoided or mitigated as could impacts to movement, reproduction and special habitats such as stopover habitat. The proposed *closed* to motorized vehicles designation for the Fay-Luther Canyon Area would allow sensitive and California status species of wildlife diversity and richness to reach potential.

The closure of three grazing allotments and a fourth to cattle grazing would allow populations of sensitive and California status to reach potential in species diversity and richness in the long-term because livestock grazing would be precluded. In the short-term, closing the allotment would benefit sensitive and California status species by allowing this area to move toward potential for species diversity and richness. There would be no cumulative effects to special status species wildlife.

#### Migratory Birds

Under Alternative A current management within the Fay-Luther Canyon Area could contribute to minor impacts to individuals of neotropical migratory bird (NTMB) species. Those areas with *open* to motorized travel designations could currently impact some NTMB species by fragmenting habitats, and blocking movement of some species and by interrupting reproductive processes. Individuals may be affected but not populations.

Continuing the current situation of allowing livestock grazing in the allotments associated with the Plan Area would favor NTMB species associated with mid or low-seral vegetation conditions. However, since livestock actually only graze one area of one allotment, only that area is currently affected. The other allotments are at or nearing potential for species richness and diversity. There would not be any cumulative effects to migratory birds from this alternative.

Under Alternative B land disposal could impact individuals of NTMB species in the long-term due to potential future county development. However, site specific project planning would identify, analyze and mitigate effects to potentially affected species.

Designation of travel routes within the Plan Area would enhance NTMB wildlife species in the long-term. Fragmentation of NTMB habitats could be avoided or mitigated as could impacts to movement, reproduction and special habitats such as stopover habitat. The proposed *closed* to motorized vehicles designation for Fay-Luther Canyon area would allow NTMB species the potential to achieve additional diversity and richness.

The closure of three grazing allotments in the Plan Area would allow populations of NTMB to reach potential in species diversity and richness in the long-term because livestock grazing would be precluded. In the short-term, removing livestock from the portion of the grazed allotment would enhance NTMB species by allowing this area to move toward potential for species diversity and richness. There would not be any cumulative effects to migratory birds from this alternative.